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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,724	11/19/2003	Richard N. Codos	LPPT-13E	6316
7590	04/18/2005		EXAMINER	
WOOD, HERRON & EVANS, L.L.P. 2700 Carew Tower 441 Vine St. Cincinnati, OH 45202			TRAN, LY T	
			ART UNIT	PAPER NUMBER
			2853	

DATE MAILED: 04/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/716,724	CODOS, RICHARD N.
	Examiner Ly T. TRAN	Art Unit 2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-2024 is/are pending in the application.
- 4a) Of the above claim(s) 14 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-13, 15-20, 24, 26-28, 31-36, 38, 41, 42 and 50-54 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. ____ .   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/28/04; 2/26/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: ____ .                                   |

## DETAILED ACTION

### ***Election/Restrictions***

1. Applicant's election without traverse of species in the reply filed on 1/24/05 is acknowledged.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-13, 15-20, 23, 34, 35 and 50-53 are provisionally rejected under the judicially created doctrine of double patenting over claims 1, 2, 11—17, 20, 21, 26, 27 and 29 of copending Application No. 09/822,795. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant

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application are claiming common subject matter, as follows: Claims 1, 2, 11—17, 20, 21, 26, 27 and 29 discloses a method of printing on a substrate comprising sensing the distance between the head and the substrate and adjust the distance from the head to the surface of the substrate.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

The nonstatutory double patenting rejection is based on a judicially created.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 5, 10, 15 are rejected under 35 U.S.C. 102(b) as being anticipate by Schwede et al (USPN 5,757,389).

With respect to claims 1, 5, 11 and 15, Schwede discloses a method for printing on a substrate comprising:

- Moving a print head carriage, having at least one ink jet nozzle thereon, parallel to a plane in which is support a substrate having a surface that is at a non-uniform location, adjust the distance and jetting ink on the surface

of the substrate (Fig.1, Column 2: line 45-67, Column 8: line 52-54),  
sensor to determined the distance (Column 2; line 62-63).

4. Claims 34-36, 41 and 42 are rejected under 35 U.S.C. 102(b) as being anticipate by Stellmach et al. (USPN 5,172,987).

With respect to claims 34-36, 41 and 42, Stellmach discloses a method for controlling the distance between the heads and the substrate comprising:

- Moving the substrate relative to the head (Fig.1)
- Detecting the position of the surface of the substrate, transmitting information, transmitting height adjustment information signal, adjust the position of the head to maintain a desired gap between the head and the substrate (Column 9: line 59-67, Column 10: line 1-52)
- At least two sensors mounted on the carriage (Column 6: line 59-63).

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 24, 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwede et al. (USPN 5,757,389) in view of Stellmach et al. (USPN 5,172,987).

Schwede fails to teach two sensors are mounted on the carriage and the sensor includes an indicator roller.

Stellmach teaches two sensors are mounted on the carriage and the sensor includes an indicator roller (Column 6: line 59-62, Column 6: line 3-9).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a roller sensor as taught by Stellmach. The motivation of doing so is to jolting the print head.

6. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwede et al. (USPN 5,757,389) in view of Fassler et al. (USPN 5,910,813).

Schwede discloses a sensor to detect the position of the surface of the substrate (Fig.1: element 14) and a table to support the substrate (Fig.1).

However, Schwede fails to teach non-flexible substrate.

Fassler shows that flexible and rigid substrate is an equivalent structure known in the art. Therefore, because flexible and rigid were art recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute rigid substrate for flexible substrate.

7. Claims 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stellmach et al. (USPN 5,172,987) in view of Fassler et al. (USPN 5,910,813).

Stellmach discloses a table to support the substrate (Fig.1).

However, Stellmach fails to teach non-flexible substrate.

Fassler shows that flexible and rigid substrate is an equivalent structure known in the art. Therefore, because flexible and rigid were art recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute rigid substrate for flexible substrate.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T. TRAN whose telephone number is 571-272-2155. The examiner can normally be reached on M-F (7:30am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LT

April 13, 2005



Stephen D. Meier  
Primary Examiner